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MEDICAL CHATBOT USING MACHINE LEARNING

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Abstract: The new healthcare delivery system is unaffordable complex, unreliable, and unsustainable. Machine Learning (ML) has revolutionized the way companies and individuals use data to increase system performance. Machine learning algorithms can be used by strategists to process a variety of organized, unstructured, and semi-structured data. This technology provides a virtual assistant who can communicate with patients in their native language to understand their symptoms, provide physician advice, and monitor health indicators. In addition, natural language processing algorithms and deep learning analytics are used to analyze customer reviews and find the nearest specialist that can help with the user's illness. A deep bilinear similarity model is also proposed in the architecture to enhance the created SQL queries used in algorithms and predictions

I. PROBLEM STATEMENT

It is difficult to have access to hospital and doctors personally on regular basis. It is time-consuming and costly to approach hospitals for normal consultancy.

There is need for localized people to connect to the medical practitioners at ease, which is possible by using machine learning approach.

II.INTRODUCTION

Technology has accelerated the shift to modern medicine in healthcare, where computer-generated analytics and the use of electronic medical reports can aid clinical and administrative activities. Regardless of process, retrieving data from a large database often necessitates the use of specialized IT knowledge and resources. As a result, health professionals often base their decisions on their own personal perceptions or the views of their colleagues. As a result, a question answering (QA) model-based information retrieval system can be especially helpful for health professionals when it comes to recognizing associated patients, predicting disease rates, and identifying effective treatments. Chat bots automate a variety of customer service functions, as well as business, institution, and organization websites.

III . RELATED WORK

The scheme's main purpose is to facilitate communications among users and healthcare practitioners by responding quickly to inquiries submitted by users. People today are more inclined to be online, yet they are unconcerned about their own health. They quit seeking medical attention for small ailments that could develop into major illnesses.

IV. METHODOLOGY

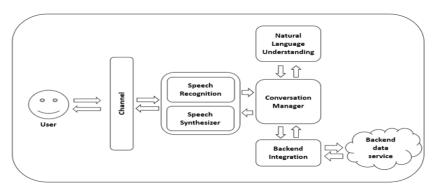


Fig : System Architecture



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User Login to System User registers on Chatbot application. Then ask queries regarding to the health care and medical details.

Ask some Questions You can ask some questions regarding some healthcare. And its related to voice- text and text-voice conversation. Using Google API for inter conversion of text-voice and vice versa.

VI. CONCLUSION

This bot utilizes an external, closed-source recognition engine, so in order to upgrade the functionality of the diagnosis, it may be obligatory to develop an engine from scrape or find discover another asset that holdup expansion that can be useful in the long run.

VI. FUTURE WORK

Chatbots have an ability to engage customers. They can also foster a relationship between customer and brands, and deliver a more personalized experience.

Bots impart information about new product launches and timely updates to the customers.

VI. REFERENCES

- [1] Victor Zhong, Caiming Xiong, et al., "Seq2sql: Generating structured queries from natural language using reinforcement learning," arXiv:1709.00103, 2017.
- [2] Xiaojun Xu, Chang Liu, et al., "Sqlnet: Generating structured queries from natural language without reinforcement learning," arXiv:1711.04436, 2017.
- [3] Tao Yu, Zifan Li, et al., "Typesql: Knowledgebased type-aware neural text-to-sql generation," arXiv:1804.09769, 2018.
- [4] Li Dong and Mirella Lapata, "Coarse-to-fine decoding for neural semantic parsing," in ACL, 2018.
- [5] Wonseok Hwang, Jinyeung Yim, et al., "A comprehensive exploration on wikisql with table-aware word contextualization," arXiv:1902.01069, 2019.
- [6] Pengcheng He, Yi Mao, et al., "X-sql: reinforce schema representation with context," arXiv:1908.08113, 2019.